Development Services Handout CA-7

Maximum Residential Development Density on Sites with Critical Areas

The presence of critical areas on or adjacent to a residential site affects the site's maximum development density (Land Use Code [LUC] 20.25H.045B). Accurately calculating your maximum density before designing your project will save you time and money and result in a faster permit review process. ⇢ See Handout CA-2, *Identify Existing Conditions Before You Design*.

Critical areas—like wetlands—are afforded special protection because of the functions they provide or—like steep slopes—because of the risk they pose to life, property, or infrastruture if they are developed.

If critical areas are present on or adjacent to a site, the portion of the site that can be developed is reduced to protect the critical areas. For residential subdivisions, the number of lots that can be created from the original site—the site's maximum development density—is also reduced. In these cases, the site's zoned density may not reflect the maximum number of developable lots that can be created.

A lower development density helps protect critical area functions like stormwater detention, water quality improvement, and wildlife habitat. It also focuses development in areas that pose less risk of flooding, landslides, and erosion. ⇢ See Handout CA-1, *Critical Area Functions*.

Residential Development Density* Calculation

STEP 1 Site Factors

Start by determining the following factors about your site. These factors are used in the equation in step 2.

DU/AC represents the site's zoned density in dwelling units per acre (e.g., R-2.5).

CA represents the total area of critical areas and critical area buffers on the site (measured in acres).

BA represents the site's buildable area, which is the area of the site (in acres) minus the site's CA (defined above).

DF represents the site's development factor, which is the BA divided by the area of the site (in acres).

STEP 2 Equation

Once you've determined the site factors above, enter them into the following equation.

$$(DU/AC \times BA) + (DU/AC \times CA \times DF)$$

= maximum development density

STEP 3 Result

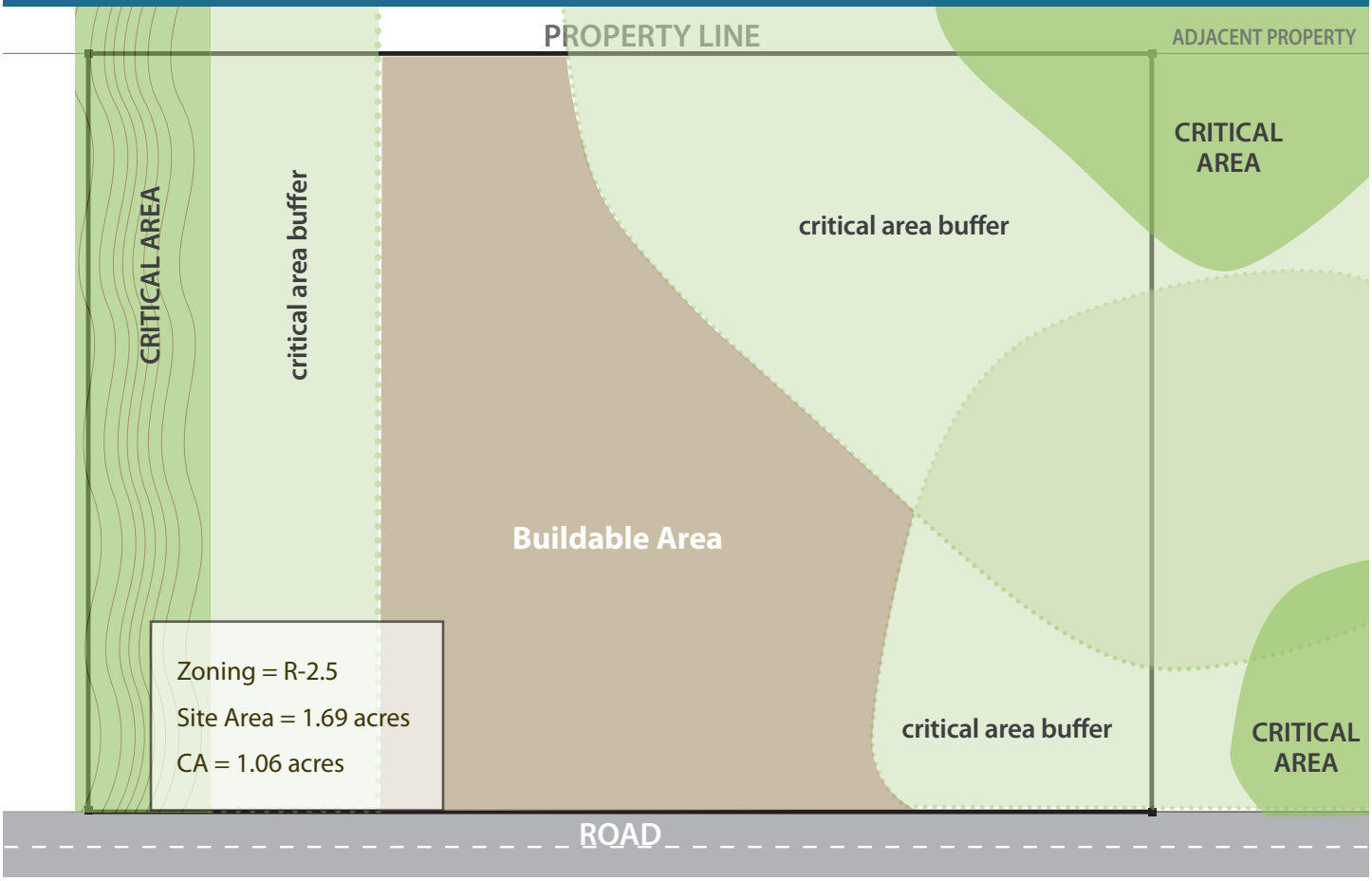
The resulting density determination is rounded down to the nearest whole number. For example, if the result of the equation is 2.33, the site has a maximum development density of 2.

When calculating the development density for your residential site, be sure to check the special requirements for plats and short plats with critical areas or critical area buffers detailed in the LUC 20.45A.060 and LUC 20.45B.055, respectively. These sections do not prevent the subdivision of the subject property, but provide additional measures intended to protect the critical area functions and values present on the site. Check with a land use planner for additional information.

⇢ See example on reverse.

*Maximum office floor area for commercial sites with critical areas is addressed in Handout CA-8.

Example Site with Critical Areas



STEP 1 Site Factors

DU/AC = 2.5

CA = 1.06 acres

BA = 1.69 acres –1.06 acres = 0.63 acre

DF = 0.63 ÷ 1.69 = 0.37

STEP 2 Equation

(DU/AC × BA) + (DU/AC × CA × DF) =

(2.5 × 0.63) + (2.5 × 1.06 × 0.37) =

1.58 + 0.98 = **2.56**

STEP 3 Result

2.56 rounded down to the nearest whole number **=** a maximum development density of **2**

If you have questions or need additional information, please contact the Land Use Desk in the Development Services Center at 425-452-4188 or landusereview@bellevuewa.gov.

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